A COMPARATIVE STUDY OF PRIVATE & PUBLIC SECTOR BANKS IN THE SCENARIO OF E-BANKING

A

SYNOPSIS

SUBMITTED

TO THE

MAHARSHI DAYANAND SARASWATI UNIVERSITY,

AJMER, RAJASTHAN

FOR THE DEGREE

OF

DOCTOR OF PHILOSOPHY

IN

COMMERCE

By

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UNDER THE GUIDANCE OF

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2016

APPENDIX - IV

MAHARSHI DAYANAND SARASWATI UNIVERSITY, AJMER

Format for Outline of Proposed Research work
(to be supplied in Six copies)

1. Nameof Scholar (In English) Mrs. Khushboo Bansal
   (In Hindi) श्रीमती खुशबू बंसल
2. Title of the Research Work :
   (In English) A comparative study of private and public sector Banks in the Scenario of E-Banking
   (In Hindi) ई-बैंकिंग के वर्तमान परिप्रेक्ष्य में निजी एवं सार्वजनिक बैंक का तुलनात्मक अध्ययन
3. Location
   a. Institution/Department where the work is to be done
   b. Geographical area of Investigation, if any.
4. Introduction Importance of Proposed Investigation, Objectives.
5. Review (Work already done on the subject of proposed Research Study.)
6. Research Gaps identified in the proposed field of investigation. (Based on the review)
7. Major Hypothesis, if any.
8. Research Methodology.
9. List of References cited.

खुशबू बंसल
15/09/2016
Signature of the Candidate with date

Outline Approved.

Name and Signature of supervisor with date & seal.

Dr. J.S. Bhatnagar
Lecturer
Samrat Prithviraj Chauhan
Govt. College, Ajmer

APPENDIX - VI

MAHARSHI DAYANAND SARASWATI UNIVERSITY, AJMER

Certificate By Supervisor

Certified that :

1. I am willing to guide the research work of Shri/Km./Smt. Khushboo Bansal on the above subject if he/she is registered for Ph.D. A comparative study of private and public sector Banks in the scenario of E-Banking

2. To the best of my knowledge, the subject selected has not been studied and is not being studied so far in any University.

3. The subject is of sufficient scope to keep the candidate engaged for two years.

4. The subject will lead to a valuable contribution. I have seen and approved the outline of proposed research work submitted by the candidate.

5. I have 3 (give numbers) Research candidates registered under my supervision and the serial number of this candidate whose application is being forwarded for registration is 1 (give the serial number)

6. The candidate is not in a close relation (the term of close relation is defined in the examination ordinance of the University)

Lecturer.....
Signature of the Samrat Prithviraj Chauhan
Supervisor with date Govt. College, Ajmer

Certified that the available facilities will be extended to Shri/Km./Smt. Khushboo Bansal for research work if he/she is registered for Ph.D.

Signature of the Principal/
Director of the Institution with date

Lecturer.....
Signature of the Head Samrat Prithviraj Chauhan
Department with date Govt. College, Ajmer

Certificate

This is to certify that Mrs. **Khushboo Bansal** D/o Mr. **Govind Bansal** has qualified the course work of Paper-II and III for Registration for the Ph.D programme in the department of commerce of the Maharshi Dayanand Saraswati University, Ajmer (name of the College/University)

Signature with date Head of the Department

Lecturer
Samrat Prithviraj Chauhan
Govt. College, Ajmer

उपाचार्य
राजकीय महाविद्यालय, अजमेर

MAHARSHI DAYANAND SARASWATI UNIVERSITY, AJMER, RAJASTHAN
2016

A COMPARATIVE STUDY OF PRIVATE & PUBLIC SECTOR BANKS IN THE SCENARIO OF E-BANKING

Schedule of Proposed Study

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2. Introduction of E-Banking
3. History of State Bank of India (SBI) and Housing Development and Finance Corporation Bank (HDFC Bank)
4. Different Tools of E-Banking
5. Research Methodology
6. Data Collection
7. Data Presentation and Data Analysis
8. Comparative Analysis of E-Banking Services of Public & Private sector Banks.
9. Conclusion
10. References and Bibliography

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- Importance of Proposed Study/Investigation
- Research objectives
- Area of Study
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  - Satisfaction and Changing behavior of Employees and Management.
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- ***E - Banking in ICICI***
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- Findings, Conclusions and Suggestions

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Introduction of Proposed Investigation/Study

History of Banking System in India

A country cannot have a healthy economy without sound banking system. The banking system should be hassle free and should be user friendly to everyone. A good banking system can strengthen the economy of a country and on the other side a weak banking system can ruin the economic system of a country.

The country like India cannot have a healthy economy without its sound and effective banking system. In the past three decades Indian Banking system has achieved several high levels which benefitted the Indian citizens as well as Indian economy.

Bank of Hindusthan (1770-1829) and The General Bank of India (established in 1786) were first two bank established in India in 17th century. The journey of Indian Banking system can be divided in to three distinct phases.

- Phase1: The early phase of Indian Banks (1786 to 1969).
- Phase2: Nationalization of Banks and Banking sector reforms (1969-1991).
- Phase3: New phase of Indian Banking system (1991- till).

Phase 1:

The first bank, Bank of Hindusthan was established in 1770, followed by The General Bank of India in 1786. The East India Company established Bank of Bengal (1809), Bank of Bombay (1840), and Bank of Madras (1843) as independent units and called them Presidency banks. These three banks were amalgamated in 1920 and the Imperial Bank of India, a bank of private shareholders (mostly Europeans) was established. In 1865, Allahabad Bank was established exclusively by Indians and another public sector bank (Punjab National Bank) was welcomed by Indian citizen in 1894. Between 1906 and 1913, Bank of India, Central Bank of India, Bank of Baroda, Canara Bank, and Bank of Mysore were set up. And, at last the Bank of all Banks, the Reserve Bank of India has been established in 1935.

Phase 2:

The Govt. of India has taken major steps to reform Indian Banking sector after Independence. The reforms had started with nationalization of Imperial Bank of India and started extensive banking facility to rural and semi-urban area. The government constituted the State Bank of India to act as the principal agent of the RBI and to handle banking transactions of the Union government and state governments all over the country. In 1969, 14 commercial banks in the country were nationalized. In the second phase of banking sector reforms, seven more banks were nationalized in 1980. With this, 80 percent of the banking sector in India came under the government ownership.

Phase 3:

This phase has introduced many more products and facilities in the banking sector as part of the reform process. In 1991, under the chairmanship of M Narasimham, a committee was set up, which worked for the liberalization of banking practices. Now the country is flooded with foreign banks and private sector banks. Both private and public sector Banks has introduced different types of facilities to their customers. The entire banking system became more convenient and swift.

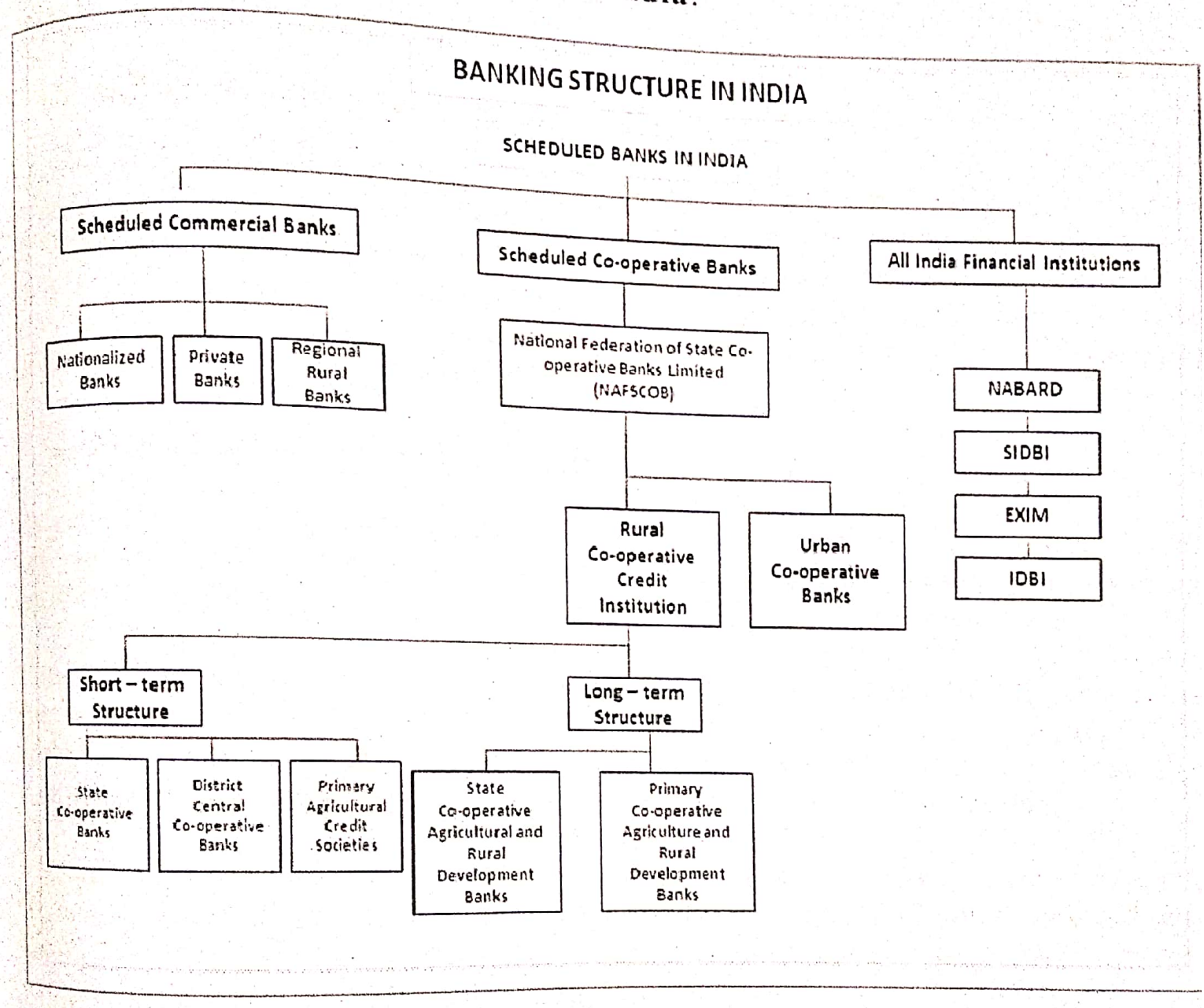
➢ Banking Structure in India:

Banking segments in India have been booming of late due to high liquidity, changing demographic profiles, changing interest rates and increasing demand for consumer finances. A brief scrutiny of the Indian banking industry would unearth the reasons behind the current scenario governed by the Banking Regulation Act of India, 1949. The Indian banking industry can be broadly classified into two major categories: Non-scheduled banks and Scheduled banks. Scheduled banks comprise of Commercial banks and the Co-operative banks. In terms of ownership, Commercial banks are further grouped into nationalized banks, i.e. State Bank of India and its group banks, Regional Rural banks and Private Sector banks. Internet banking is the wave of the future. It provides enormous benefits in terms of ease and cost of transactions, either through internet telephone or other electronic delivery channels. It is considered to be the segment of e-business to the extent that banks are involved in the conduct of business transactions via electronic media.

The organizational structure of Indian Banking sector consists with Scheduled Commercial Banks, Scheduled Co-operative Banks and other financial

institutions. The present structure of Indian Banking sector has been analyzed below.

Organizational Banking Structure in India:



Introduction of Public Banks in India:

A **public bank** is a bank, a financial institution, in which a state or publi actors are the owners. It is a company under state control. Public Sector ban means any Government Sector Bank/Institute that goes public... means tha issues it share to general public. It also has a greater share of governmer (more than 50%) so that the main motto of socia welfare other than Maximising Profit remains. A public sector bank also look

for funding developmental work in the country as the government has a majority share in it. The first objective would always be to make profit. Every organization whether private or public is here to make profits so that it could justify their existence. But public sector banks involves public also. Public here means common people like us.

➢ Introduction of Private Banks in India:

Private Sector Banks are those Banks where the management is controlled by Private individuals and Government does not have any say in the management of these banks. Maximising profit is the basic motto. Private sector bank is managed and controlled by the private individuals and there is least government interference. It is controlled by the rules set by the central bank (RBI). Motive is profit maximization.

➢ Computerization of Banks in India

E-commerce and e-banking are the buzz words in the global commercial activities today. E-banking or Electronic banking refers to conducting banking activities with the help of information technology (IT) and computers.

Computerization of banking functions in India was resisted by labour unions for fear of loss of job opportunities. Secondly, computerization needs IT savvy personnel which require intensive technical training. Thirdly, computerization needs heavy capital outlay for purchase of machines.

Fourthly, to have effective computerization of banks a large number of bank branches situated in rural areas need to be connected. Telecommunication facility at rural areas is slow to reach. For the reasons mentioned above, computerization made a slow entry in Indian banks.

Indian banks on the other hand have been using IT more out of compulsion and primarily for transaction processing. They now need to adopt IT to reposition banks into the integrated financial services market.

The need for providing improved customer service, reducing transaction costs and increasing productivity, shall be the main drivers for banking sector to adopt IT. These considerations are particularly important for public sector banks in India, who are facing immense competition from private and foreign banks.With growing competition faced by foreign banks and financial

institutions, the public sector banks in co-operation with the Indian IT industry would need to equip themselves for the next phase of introducing the benefits of IT to their customers by providing a centralized banking solution.

Introduction of E – Banking

Net banking allows for customers of financial institutions to perform transactions online through a website interface. First introduced in 1994 by Stanford Federal Credit Union in 1994, net banking is now available across the spectrum of the financial industry, from traditional institutions to banks that exist only online.

Net banking is changing the ways that people interact with financial institutions by enabling transactions to be performed through personal computers and mobile devices. This access allows customers to be in virtual contact with their banks on a regular basis, while minimizing the time spent in a physical location. For example, smart-phone apps allow customers to make deposits by taking pictures of the front and back of checks, which eliminates the need to go to a brick and mortar location. Online banking also enables paperless bill paying, record keeping and money transfers between accounts.

Net banking allows customers to access their Accounts around the clock. This facilitates real-time account maintenance, which can be done while traveling, sitting at a coffee shop or after arriving home late from work. Online access provides the convenience and time savings of being able to take care of banking activities without needing to drive to a physical location and wait in line for a teller's window to open. These advantages can also be applied to loan applications and assessing interest rates on time deposits such as certificates of deposit.

Some of the disadvantages of net banking depend on whether the institution has brick and mortar locations or is online only. For banks that have only a virtual presence, disadvantages include the absence of face-to-face conversations for customer service issues or special situations such as applying for business loans. One example of this type of disadvantage would be a situation that requires the customer to provide documentation, such as when overdraft fees are being contested. Instead of being able to walk in a

bank branch and present paperwork in person, the customer would need to print out the documents and either fax or scan and email them.

Online banking presents challenges to the financial industry as well as end users. For traditional banks, the biggest challenge is keeping up with rapidly evolving technologies and alternative banking options. Online banks present one form of competition, while digital payment systems such as Apple Pay, Google Wallet and PayPal offer alternatives to traditional credit cards. Account security presents challenges to both banks and end users. The financial industry has become one of the primary targets of professional hackers, while the loss of a mobile device, for example, can result in full access to an online bank account for the person who finds it.

The banking industries are mostly customer driven and their survival in competitive environment largely depends on new technological services provided by them. Technology plays a vital role in improving the quality of services provided by the banking sectors. One of the technologies, which really brought information revolution in the society, is Internet Technology and is rightly regarded as the third wave of revolution after agricultural and industrial revolution.

Advent and adoption of internet by the banking sector has removed the constraint of time, distance and communication making globe truly a small village. Financial sector being no exception, numerous factors such as competitive cost, customer service, increase in education and income level of customers etc. influence banks to evaluate their technology and assess their electronic commerce and internet banking strategies. Internet banking allows banking from anywhere, anytime and is used for transactions, payments etc. over the internet through a bank, a credit union or society's secure website. So, basically in internet banking a client has one-to-one interaction with the bank's website and in such a situation it is essential on the part of bank to provide high quality services over the internet.

E-banking is the wave of the future. It provides enormous benefits to consumers in terms of ease and cost of transactions, either through Internet, telephone or other electronic delivery. Electronic finance (E finance) has become one of the most essential technological changes in the financial industry. E-finance as the provision of financial services and markets using electronic communication and computation. In practice, e-finance includes e-payment, e-trading, and e-banking.

A system allowing individuals to perform banking activities at home, via the internet. Some online banks are traditional banks which also offer online banking, while others are online only and have no physical presence. Online banking through traditional banks enable customers to perform all routine transactions, such as account transfers, balance inquiries, bill payments, stop-payment requests, some even offer online loan and credit card applications. Account information can be accessed anytime, day or night, and can be done from anywhere.

A few online banks update information in real-time, while others do it daily. Once information has been entered, it doesn't need to be re-entered for similar subsequent checks and future payments can be scheduled to occur automatically. Many banks allow for file transfer between their program and popular accounting software packages, to simplify recordkeeping. Despite the advantages, there are a few drawbacks. It does take some time to set up and get used to an online account. Also, some banks only offer online banking in a limited area. In addition, when an account holder pays online, he/she may have to put in a check request as much as two weeks before the payment is due, but the bank may withdraw the money from the account the day that request is received, meaning the person has lost up to two weeks of interest on that payment. Online-only banks have a few additional drawbacks: an account holder has to mail in deposits (other than direct deposits), and some services that traditional banks offer are difficult or impossible for online-only banks to offer, such as traveler's checks and cashier's checks.

➢ Internet Banking in India

In the developing countries, consumers are now focusing into other substitute channel like electronic commerce for shopping which are offering them more and more choices of products and services in order to help cost savings and its ease. Rapid growth of online shopping stuff and changing fashion of consumer behavior is attracting more and more companies to join the bandwagon. Information and communication technology is helping to reduce the transaction cost of the business firms by providing cards and business services. Electronic banking would help financial institutions to lower cost, which is very crucial for the long-term survival of the banks (Burnham, 1996). Financial institutions are now focusing on new delivery channels, which include virtual public and private networks, dial up connections, personal computers and Automated Teller Machines (ATMs). The websites of financial

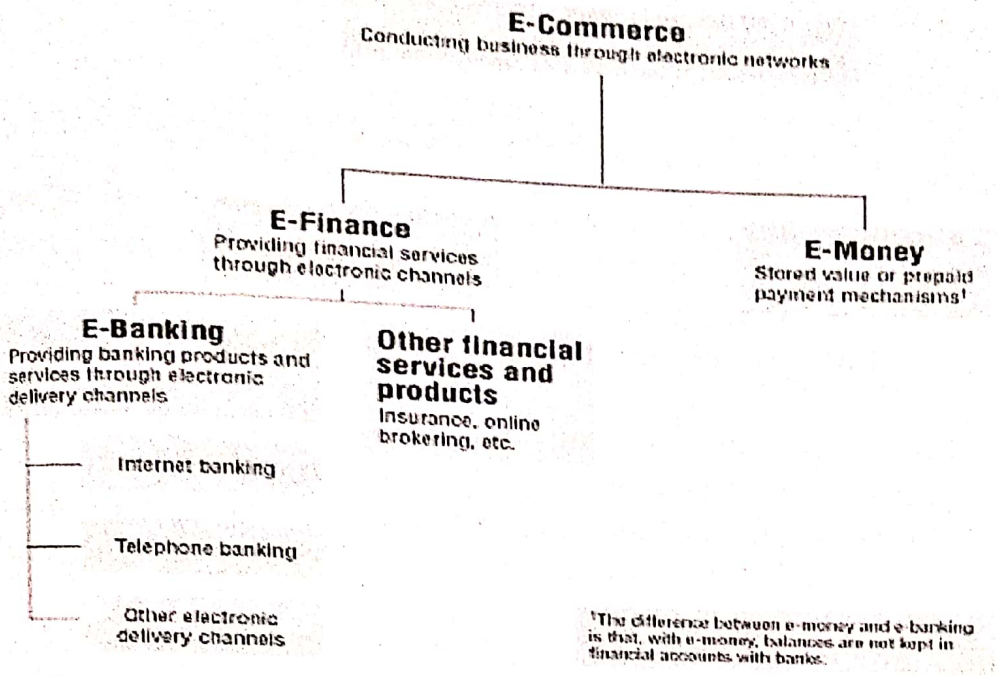
institutions play a vital role in electronic banking and deliver the sufficient information to customers.

Growth of internet banking in a country depends on many factors, such as, success of internet access, new online banking features, household growth of internet usage, legal and regulatory framework. It can offer speedier, quicker and dependable services to the customers who are relatively satisfied than the manual system of banking. Moreover, internet banking is gaining its importance in India. Customer's satisfaction is necessary for the banking sector to elevate profitability, business expansion and accomplishment. Now-a-day's banking sector is modernizing and expanding its hand in different financial events every day. At the same time the banking process is becoming faster and easier. In order to survive in the competitive field of the banking sector, commercial banks are looking for better service opportunities to provide their customers.

Internet banking is used widely by masses, and has numerous benefits to offer. Nowadays, all banks provide online banking facility to their customers as an added advantage. Gone are the days, when one had to transact with a bank, which was only in his local limits. Online banking has opened the doors for all customers to operate beyond boundaries. Nowadays, people are so busy in their work lives, that they don't even have time to go to the bank for conducting their banking transactions. Internet banking enables people to carry out most of their banking transactions using a safe website, which is operated by their respective banks. It provides many features and functions to their customers and enables them to view their account balance, transfer money from their account to another account in the same bank or any other bank, view their accounts summary etc.

Internet banking allows customers to perform a wide range of banking transactions electronically via the bank's web site. When first introduced, Internet banking was used mainly as an information presentation medium in which banks marketed their products and services on their web sites. With the development of asynchronous technologies and secured electronic transaction technologies, however, more banks have come forward to use internet banking both transactional as well as an informational medium. As a result, registered internet banking users can now perform common banking transactions such as paying bills, transferring funds, printing statements and inquiring about account balances.

What is electronic banking?


E-Commerce
Conducting business through electronic networks
E-Finance
Providing financial services through electronic channels
E-Money
Stored value or prepaid payment mechanisms[1]
E-Banking
Providing banking products and services through electronic delivery channels
Other financial services and products
Insurance, online brokering, etc.
Internet banking
Telephone banking
Other electronic delivery channels
[1]The difference between e-money and e-banking is that, with e-money, balances are not kept in financial accounts with banks.

➢ Advantages of Internet Banking

Internet Banking has several advantages over traditional one which makes operating an account simple and convenient. It allows you to conduct various transactions using the bank's website and offers several advantages. Some of the advantages of internet banking are:

- Online account is simple to open and easy to operate.
- It is quite **convenient** as you can easily pay your bills, can transfer funds between accounts, etc. Now you do not have to stand in a queue to pay off your bills; also you do not have to keep receipts of all the bills as you can now easily view your transactions.
- It is available all the time, i.e. 24x7. You can perform your tasks from anywhere and at any time; even in night when the bank is closed or on holidays. The only thing you need to have is an active internet connection.
- It is fast and efficient. Funds get transferred from one account to the other very fast. You can also manage several accounts easily through internet banking.

- Through Internet banking, you can keep an eye on your transactions and account balance all the time. This facility also keeps your account **safe**. This means that by the ease of monitoring your account at anytime, you can

get to know about any fraudulent activity or threat to your account before it can pose your account to severe damage.

- It also acts as a great medium for the banks to endorse their products and services. The services include loans, investment options, and many others.

Disadvantages of Internet Banking

Though there are many advantages of internet banking, but nothing comes without disadvantages and everything has its pros and cons; same is with internet banking. It also has some disadvantages which must be taken care of. The disadvantages of online banking include the following:

- Understanding the usage of internet banking might be difficult for a beginner at the first go. Though there are some sites which offer a demo on how to access online accounts, but not all banks offer this facility. So, a person who is new, might face some difficulty.

- You cannot have access to online banking if you don't have an internet connection; thus without the availability of internet access, it may not be useful.

- Security of transactions is a big issue. Your account information might get **hacked** by unauthorized people over the internet.

- **Password security** is a must. After receiving your password, do change it and memorize it otherwise your account may be misused by someone who gets to know your password inadvertently.

- You cannot use it, in case, the bank's server is down.

- Another issue is that sometimes it becomes difficult to note whether your transaction was successful or not. It may be due to the loss of net connectivity in between, or due to a slow connection, or the bank's server is down.

Internet Banking has definitely made the life easy for users by providing online access to various banking services.

How to use Net Banking

Net banking, or online banking as it is sometimes called, was slow to catch on at first. People now realize online access to your bank Account can be extremely useful. You can't exactly get money like at an ATM, but other than getting cash directly in your hand, you can do all kinds of things with your account and your money. Getting set up and learning how to use net banking is fairly straightforward, and you can start in less than 20 minutes.

Confirm that your bank has net banking. Different banks call it by different names, but if you ask about net banking or online banking, your bank should know what you mean. If you go to the bank's website, you will probably find information about it there as well.

Register for net banking with the bank. This can usually be done online or at a branch office. You will need your bank account number and you will probably have to sign or click to accept an agreement.

Create a password. Every bank is different. Some will email or snail-mail you can automatically created password. Most banks, however, will let you create your own password. You should pick something that is memorable to you, but that is not a normal word. It should have numbers and not be easy to guess.

Access net banking by going to the website that your bank uses for net banking. Usually, there is a link from the bank's main website. You will need your password and the username that was generated when you registered.

Using whatever options your bank provides, you can view your account balance and past transactions, and pay bills. Every banking website is different, but usually, there are easy-to-navigate links to perform each transaction.

Log out of the website to make sure that no one can access your information. Go back to the net banking site's homepage to make sure you are logged out and can't see any personal information showing up.

➢ The three broad facilities that e-banking offers are:

- ❖ Convenience- Complete your banking at your convenience in the comfort of your home.
- ❖ No more Qs- There are no queues at an online bank.
- ❖ 24x7 service- Bank online services is provided 24 hours a day, 7 days a week and 52 weeks a year.

➢ Various Online Services

Online banking account is easy to open and operate. The online services offered might differ from bank to bank, and from country to country. To know about the various services, always go through the welcome kit that you get at the time of opening the account. You also get the password to access your online account, which you are supposed to keep with great care for security reasons.

The common **online services** offered by banks are:

- **Transactional activities** like funds transfer, bill pay, loan applications and transactions.
- **Non-transactional activities** like request for cheque book, stop payment, online statements, updating your contact information.

➢ Forms of e - Banking

Internet banking is gaining ground. Banks increasingly operate websites through which customers are able not only to inquire about account balances and interest and exchange rates but also to conduct a range of transactions. Unfortunately, data on Internet banking are scarce, and differences in definitions make cross-country comparisons difficult. Even so, one finds that Internet banking is particularly widespread in Austria, Korea, the Scandinavian countries, Singapore, Spain, and Switzerland, where more than 75 percent of all banks offer such services. The Scandinavian countries have the largest number of Internet users, with up to one-third of bank customers in Finland and Sweden taking advantage of E-banking. Different forms of E-banking are as follows:

❖ Internet Banking -

Internet Banking (IB) is a radical technological innovation with potential to change the structure and nature of banking. To sustain business competitiveness, more and more banks are transforming from their traditional approach of "bricks and mortar" into a "clicks and mortar" one under the recent emergence of electronic commerce and business. IB is the latest in the series of technological wonders of the recent past.

❖ Automated Teller Machines (ATM) -

A major technological development, which has revolutionized the delivery channel in the banking sector, has been the Automated Teller Machines (ATMs). HSBC was the first bank to introduce ATM in India in 1987. Later new private sector banks have taken the lead in introducing ATMs in a big way and the public sector banks also pursued the installation of ATMs all over the country.

❖ Tele Banking or Mobile Banking -

Mobile banking or M-Banking is an extension of IB. Mobile banking is defined as the "type of execution of financial services which the customer uses mobile communication techniques in conjunction with mobile devices. In other words, it means the usage of mobile telecommunication devices for carrying out banking and financial transactions. Since the penetration rate of Mobile phones in India is much higher than the penetration rate of internet, mobile phones is an excellent delivery channel to reach banking customers.

❖ Smart Card –

A smart card, chip card, or integrated circuit card (ICC) is any pocket-sized card that has embedded integrated circuits. Smart cards can be either contact or contactless smart card. Smart cards can provide personal identification, authentication, data storage, and application processing. Smart cards may provide strong security authentication for single sign-on (SSO) within large organizations.

❖ Debit Card -

A debit card can be used to withdraw cash from a bank like an ATM card and it can also be used at stores to pay for goods and services in place of a cheque. Debit card allows the holder to spend only what is in his account.

❖ Credit Card -

Credit card is a mechanism by which the card holder can make purchases without immediate cash payments. It enables the card holders to avail credit facilities from the issuing banks for a specified period of time without any security

❖ Electronic Clearing System (ECS)-

Electronic Clearing Service (ECS) is a mode of electronic fund transfer from one bank account to another bank account through the clearing houses of Reserve Bank of India. This is normally for bulk transfers from one account to many accounts or vice-versa in the form of ECS-credit and ECS-debit.

ECS (Credit) is used when an institution is required to make bulk or repetitive payments in the form of dividend to shareholders, interest to investors, salary/pension to employees etc.

ECS (debit) is used when an institution is required to collect an amount, by raising a debit, at a prescribed frequency from many customers in the form of telephone or electricity charges, house tax, water tax, loan installments etc.

❖ Real Time Gross Settlement (RTGS)-

Real Time Gross Settlement System (RTGS) is a mechanism of transferring funds from one bank to another on a 'real time' and on 'gross' basis. Under RTGS, the minimum amount of fund transfer is Rupees Two Lac (3100 US $) and there is no limit to the maximum amount. RTGS transactions are interbank as well as between customers through bank accounts.

❖ National Electronic Fund Transfer (NEFT) -

National Electronic Fund Transfer (NEFT), introduced in October 2005, is a nation-wide electronic payment system that uses a secure mode of transferring funds from one bank branch to another bank branch. There is no limit either minimum or maximum on the amount of funds that could be transferred using NEFT. The fund transfer takes place in hourly batches - there are eleven settlements from 9 am to 7 pm on week days and five settlements from 9 am to 1 pm on Saturdays.

➢ Future of e - banking

There will be a large-scale shift to online banking in the next decade as banks go the extra mile in technology developments to keep up with the competition It is believed the low transaction cost will make banking on the Net irresistible, but also that this will require institutions to carefully consider and plan customer relations programs.
It is believed that everything will be determined by content and context, and where execution will be key. From a customer and service provider perspective, this is where the world is moving-it is going to be real-time, on-line, personalization for both marketing and the service experience. If existing banks don't want to disappear, it is this challenge that they need to embrace in order to win and survive.

Importance of proposed Investigation/study

Today, Indian banking industry is in the midst of IT revolution. A great deal of automation is observed in Indian banking industry these days. New private sector banks and foreign banks have an edge over public sector banks as far as implementations of technological solutions are concerned. Bankers in India are continuously looking for the newer know-how's to improve service quality of their banks to gain competitive edge. Therefore, service quality in Internet banking plays a vital role for retaining customers and meeting the customer's satisfaction level. In Indian context, quality of service in Internet banking has not been adequately emphasized. Therefore, it is essential to focus on quality of service in Internet banking. In doing so, it can provide guidelines for the bankers to implement the quality programme in Internet banking.

➢ Importance of E-banking in Business

Start-up companies to more established entities, small businesses rely on e-banking to eliminate runs to the bank and to make financial decisions with updated information. In an information-driven business climate, companies who do not use e-banking are at a competitive disadvantage.

❖ Activity Review

Business Businesses rely on efficient and rapid access to banking information for cash flow reviews, auditing and daily financial transaction processing. E-banking offers ease of access, secure transactions and 24-hour banking options. From small owners, accounting staff and other approved employees can quickly through an online banking interface. This ease of review helps ensure the smooth processing of all banking transactions on a daily basis, rather access routine banking activity such as deposits, cleared checks and wired funds than waiting for monthly statements. Errors or delays can be noted and resolved quicker, potentially before any business impact is felt.

❖ Productivity

E-banking leads to productivity gains. Automating routine bill payments, minimizing the need to physically visit the bank and the ability to work as needed rather than on banking hours may decrease the time involved in performing routine banking activities. Additionally, online search tools, banking actions and other programs can allow staff members to research transactions and resolve banking problems on their own, without interacting with bank employees. In some cases, month-end reconciliations for credit card transactions and bank Accounts can be automated by using e-banking files.

❖ Lower Banking Costs

Banking relationships and costs are often based on resource requirements. Businesses that place more demands on banking employees and need more physical assistance with wire transfers, deposits, research requests and other banking activities often incur higher banking fees. Opting for e-banking minimizes business overhead and banking expenses.

❖ Reduced Errors

Utilizing e-banking reduces banking errors. Automation of payments, wires or other consistent financial activities ensures payments are made on time and may prevent errors caused by keyboard slips or user error. Additionally, opting for electronic banking eliminates errors due to poor handwriting or mistaken information. In many cases, electronic files and daily reviews of banking data can be used to double or triple check vital data, which increases the accuracy of financial statements.

❖ Reduced Fraud

Increased scrutiny of corporate finances through audits and anti-fraud measures requires a high level of visibility for all financial transactions. Relying on e-banking provides an electronic footprint for all accounting personnel, managers and business owners who modify banking activities. E-banking offers visibility into banking activities, which makes it harder for under-the-table or fraudulent activities to occur.

➢ Statement of the Problem

Many people, who are not comfortable with computers and the Internet, often find it difficult to use internet banking. Therefore, for beginners, internet banking is really a time consuming work. In addition to this, people find a difficulty in trusting a completely mechanized system like internet banking, in case of financial matters. In many instances, a simple mistake by clicking a wrong button may create a big problem. Therefore, many individuals often keep wondering if they have properly executed the transaction. However, this uneasiness can be avoided by printing the transaction receipt and keeping it with oneself, until the bank statement is receive

➢ Challenges in adoption of E-banking:

E-banking is facing following challenges in Indian banking industry:

- The most serious threat faced by e-banking is that it is not safe and secure all the time. There may be loss of data due to technical defaults.
- E-banks are facing business challenges. For the transactions made through internet, the service charges are very low. Unless a large number of transactions are routed over the Web the e-banks cannot think of profit.

- There is lack of preparedness both on part of banks and customers in the adoption of new technological changes.
- There is lack of proper infrastructure for the installation of e-delivery channels.

➢ **State Bank of India in the scenario of E-Banking:**

Ranked No. 1 The highest ranked bank of India is State Bank of India. This bank is the oldest as well as ranked 1 in the list of banks with best internet banking facilities. Not only that, it has the largest votes in every parameter be it profit, assets, revenues, etc. this government bank was founded in 1806 and is the 2nd biggest bank in the whole world. With a score of 18,354 branches and 8500 ATMs, this is also accountable, for 20% portion of loans by Indian Bankers. Its lead to employee satisfaction, Time saving, Data auto save. Easy to track the banking transactions on day to day basis. Top management can evaluate their employee performance. Customer can work at their place , they can they can do their transaction online and without time bound , They can transfer fund one account to another account.

➢ **ICICI Bank in the scenario of E-Banking:**

Ranked No. 2 The 2nd largest bank in India is ICICI bank. There are in all 4,450 branches and 14,240 ATMs of this individual bank. This bank offers high-end facilities like internet banking, Mobile banking, etc. The bank not only serves in India but has branches over 18 different countries in the world which includes Canada, Russia, UK and more bu

yet has the main headquarters in Mumbai, India. Along with being the 2nd best bank to provide internet banking, it also provides investment banking, life-insurance, non insurance, assets management and so much more. Its lead to employee satisfaction, Time saving, Data auto save. Easy to track the banking transactions on day to day basis. Top management can evaluate their employee performance. Customer can work at their place , they can they can do their transaction online and without time bound , They can transfer fund one account to another account.

Objectives of the Investigation/proposed study

Objectives of this study are to understand the experience in offering banking transactions through electronic delivery channels and functions of E-Banking in India. Objectives of the proposed study are:

1) To compare the various e-banking services/products adopted by public & private sector banks.
2) To study and analyze the progress made by Indian banking industry in adoption of technology.
3) To study the challenges faced by Indian banks in adoption of technology and make recommendations to tackle these challenges.
4) Comparative study of the customer's and Banker's satisfaction towards internet banking in public and private sector banks.
5) To identify the factors influencing the customers' satisfaction towards internet banking.

6) To offer a suitable suggestion to improve the customer services of the banks based on the findings.

7) To study the awareness among customers regarding e-banking.

8) Perceptual mapping of Internet Banking users.

9) To compare the behavioral change among the e-banking users of public & private sector banks.

10) To study the popularity of e-banking among different age group.

11) To explore the risk factors involved in e-banking transaction.

Research Gap

E-Banking concept is not new for banking sector. So many research has done on E-Banking. But in my knowledge I found a huge gap as a comparative study about public and private sector banks in the scenario of Customer satisfaction, employee's satisfaction and Bank's profitability affected by E-Banking revolution.

Literature Review

The relevant literature relating to the topic is reviewed as under:

Joseph M. et al (1999), the study investigates role of technology on Australian banking sector and 300 customers were surveyed. The findings suggested that except from convenience/accuracy and efficiency e banking services did not match with importance rating specified by customers.

Nath Ravi & Schrick Paul (2001), e-Service Journal, Bankers' Perspectives on Internet Banking, Vol. 1, no. 1. In every industry, E-commerce is revolutionizing the way business is conducted. New business models are replacing outdated ones and organizations are rethinking business process designs and customer relationship management strategies. Banks are no

exception to this transformation. This study examines bankers' views on providing banking services to customers using the web banks The results show that Internet banking is in its nascent stage—only a small number of offer web-based banking to customers and the full benefits of Internet banking are still to be realized by many banks.

Zhou, L (2004), The study analyzed impact of service quality in banks on customer satisfaction in china's retail banking and it was found out that reliability and assurance were the primary drivers of customer satisfaction. It was also found out that there were significant variations in expectations and perceptions in customers.

Debashis and Mishra (2005), The study analysed and measured customer satisfaction in branch services provided by nationalized banks in northern India. 1200 customers were given questionnaires and it was found out that computerization, accuracy in transactions, attitude of staff and availability of staff Influenced customer satisfaction. Least important factor was promotion of the products and various schemes.

Mushtaq M Bhat (2005), this study finds out service quality parameters in bank through SERVQUAL and influence of demographic variables. The study was limited to SBI, PNB, Jammu and Kashmir bank Citi bank and Standard Chartered Grind lay's bank. Sample size was 800 and study found out that foreign banks are better than Indian banks. SBI was found to be relatively poor on reliability and responsiveness. Banks in Delhi were comparatively better in service quality.

Mohammad et al (2005), The study tries to develop a comprehensive model of banking automated service quality taking into consideration unique attributes of each delivery channel and other dimensions which influence service quality.

P K Gupta (2008), Objective of this study was to find out the behavior of customers with respect to internet banking vis-à-vis conventional banking. The study found out that internet banking was found to be easier and speedier than conventional banking and trust, accuracy and confidentiality were the most important factors here.

Rod et al (2009), The study focused on relationship between service quality, overall internet banking service quality and customer satisfaction in New Zealand. The study found out that online customer service quality and online

information systems were significantly and positively related to overall customer internet banking service quality. Overall internet banking service quality and customer satisfaction were positively correlated

Pooja Malhotra & Balwinder Singh (2009), Eurasian Journal of Business and Economics, The Impact of Internet Banking on Bank Performance and Risk: The Indian Experience, Vol. 2 no. 4. The paper describes the current status of internet banking in India and it's implication for the Indian banking industry. The attempt was made to see if there is any association between adoption of Internet banking and the banks' performance and risk. The internet banking has a negative and significant impact on risk, which shows that, the adoption of Internet banking has not increased the risk profile of banks.

Neha Dixit & Dr. Saroj K Dutta (2010), Journal of Internet Banking and Commerce, Acceptance of E-banking among Adult Customers: An Empirical Investigation in India, Vol. 15 no. 2. Points out that in a country like India there is a need for providing better and customized services to the customers which can be make possible through e-banking. The people have positive perception about online banking, should be treated with the great value.

Nahum Goldmann (2010), Journal of Internet Banking and Commerce, ICEP2010 (International Conference on ecommerce and e-payments, Poland 14-16 September 2010), Vol. 15 no. 3. In this paper statical analysis, descriptive statistics was used to explain demographic profile of respondents and also factor regression analysis was used to know the trend of internet use and the factors affecting e banking.

Sachin Mittal&Rajnish Jain (2010), This paper is basically a literature review of banking industry and effect of IT based services on customer satisfaction. The study highlights customer satisfaction levels among young customers in banking industry. A survey indicates the gaps between customer's expectations and perception with respect to IT based banking services. Findings indicated need to improve the IT based services for enhancing customer satisfaction

Joshua A J & Moli P Koshy (2011), Journal of Internet Banking and Commerce, Usage Patterns of Electronic Banking Services by Urban Educated Customers: Glimpses from India, Vol. 16 no. 1. This paper examines various usage patterns of technology-enabled banking self services such as ATM services, internet banking services, tele banking services and mobile banking

services. Only if the users start using all kinds of services within the ambit of the electronic banking would the adoption of these services would be complete and the users would then derive maximum benefit from these electronic banking channels.

Durgesh Pattanayak (2011), European Journal of Business and Management, Effect of TQM on customer satisfaction in Indian Banking industry, vol. 3, no. 2. This research attempts to close the research gap of relationship between TQM and Customer satisfaction. So the objective is to find out the association between the multidimensionality of TQM and Customer satisfaction in the banking industry in the Indian context. Customer satisfaction is important for banking industry. And implementation of TQM in banking industry helps improving customer satisfaction. So using TQM banks can be benefited by satisfying consumers.

Kumbha, Vijay (2011), It examined the relationship between the demographics and customers' satisfaction in internet banking,. It also found out relationship between service quality and customers' satisfaction as well as satisfaction in internet banking service provided by the public sector bank and private sector banks. The study found out that overall satisfaction of employees, businessmen and professionals are higher in internet banking service. Also it was found that there is significant difference in the customers' perception in internet banking services provided by the public and privates sector banks.

Enrico Perotti & Lev Ratnovski (2011), International Journal of Central Banking, Capital Regulation and Tail Risk, vol. 7 no. 4. This article explains the Capital regulations and tail risk, it shows that regulatory reform in the wake of the recent financial crises has focused on an increase in capital cushions of financial intermediaries. The results are consistent with stylized facts about pre-crisis bank behavior and have implications for the design of bank regulation.

Michael A. S. Joyce, Ana Lasaosa, Ibrahim Stevens (2011), International Journal of Central Banking, The Financial Market Impact of Quantitative Easing in the United Kingdom, vol. 7, no. 3. This paper investigates the impact of the Bank of England's quantitative easing policy on UK asset prices. The effectiveness of QE asset purchases will ultimately be judged by their impact on the wider macro economy. Our analysis suggests that the purchases have had a significant impact on financial markets and particularly

gilt yields, but there is clearly more to learn about the transmission of those effects to the wider economy.

Ramona Jimborean and Jean-St´ephane (2010), International Journal of Central Banking, Banks' Financial Conditions and the Transmission of Monetary Policy: A FAVAR Approach, Vol. 6 no. 4. Here author has proposed a novel approach to access banks financial condition. It includes factors summarizing large sets of individual bank's balance sheet. It also investigates that the macro economic consequences of shocks and depression in banks performance has its long lasting impact.

V. Joshi (2011), Journal of Banking Information Technology and Management, NPA Management – A critical issue for Banking Industry, vol. 09, no. 2. The NPA have direct impact on banks' profitability, liquidity. The NPAs of India banking are relatively huge by international standard. The biggest ever challenge that the banking industry now faces is management of NPA. So this study is useful in the study of e banking too because the researcher should have the knowledge of complete banking reforms including NPA also.

Hypothesis of the proposed Investigation/Study

(1) **H0 (Null Hypothesis):** There is no significant difference between public and private sector banks are offering the e-banking services.

H1 (Alternative Hypothesis): There is significant difference between public and private sector banks are offering the e-banking services.

(2) **H0 (Null Hypothesis):** There is positive impact on customers and bankers satisfaction towards e-banking in public and private sector banks.

H1 (Alternative Hypothesis): There is no positive impact on customers and bankers satisfaction towards e-banking in public and private sector banks.

(3) **H0 (Null Hypothesis):** There is the progress made by Indian banking industry in adoption of technology.

H1 (Alternative Hypothesis): There is no progress made by Indian banking industry in adoption of technology.

(4) **H0 (Null Hypothesis):** There is the risk factors involved in e-banking transaction.

H1 (Alternative Hypothesis): There is no risk factors involved in e-banking transaction.

Research Methodology

- **Method of Research Methodology**

The **primary data collection method** and **secondary data collection method** will use to two banks are selected i.e., one from public sector namely State Bank of India (SBI) and another from private sector banks namely Industrial Credit and Investment Corporation of India (ICICI) in Ajmer district.

Methods **of Primary Data collections** will use in this study are as follows:-

1) Questionnaire Method
2) Interview Method
3) Survey Method

The **secondary data** will be collected through books, magazines, internet, etc.

- **Universe of the proposed study:**

Universe of SBI Bank (Public Bank):

Total number of branches of SBI Bank at India level – 18354

Total number of branches of SBI Bank at Rajasthan level – 396

Universe ICICI Bank (Private Bank):

Total number of branches of ICICI Bank at India level - 4450

Total number of branches of ICICI Bank at Rajasthan level – 456

- **Sample Size of the proposed study:**

Sample size of SBI Bank (Public Bank):

Some important branches has been taken for comparative study from major cities of Rajasthan i.e. Jaipur, Jodhpur, Udaipur, Ajmer– 36

Number of employees to be interviewed – 225

Number of customers to be interviewed – 1500

Sample size of ICICI Bank (Private Bank):

Some important branches has been taken for comparative study from major cities of Rajasthan i.e. Jaipur, Jodhpur, Udaipur, Ajmer–45

Number of employees to be interviewed – 243

Number of customers to be interviewed – 1500

➢ Sampling Method

For the purpose of primary data collection, One Thousand Five Hundred customers each from public sector and private sector banks respectively are selected based on **stratified proportionate random sampling** method.

➢ Data Presentation and Analysis:

The available information will be analyzed and presented with the help of Statistical Techniques, Graph, Diagrams, Ratios, Pie-chart etc. Statistical Averages will also be used for the analysis of collected data.

The primary as well as secondary data shall be analyzed through suitable statistical techniques such as the chi-square test, time series, etc.

➢ Research Design:

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In short research methodology is the underlying theory of how research should be conducted. The researches are of three types i.e. Experimental research, Descriptive research and Historical research. This research will give the answer 'what exists', thus it will Descriptive research. The research further classified as qualitative or quantitative. This study will quantitative research. This research will descriptive and statistical research as it compared the customer's and banker's opinion about E-Banking in the scenario of public and private sector banks.

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- www.sbi.com, www.icicibank.com

Signature of the Candidate with date

खुशबू बंसल 15/09/2011

(KHUSHBOO BANSAL)